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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/993,844	11/05/2001	Robert H. Oakley	033072-026	8005
21839	7590	06/23/2004	EXAMINER	
BURNS DOANE SWECKER & MATHIS L L P POST OFFICE BOX 1404 ALEXANDRIA, VA 22313-1404			ULM, JOHN D	
		ART UNIT	PAPER NUMBER	
		1646		

DATE MAILED: 06/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/993,844	OAKLEY ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	John D. Ulm	1646	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 01 April 2004.
- 2a) This action is **FINAL**.      2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) 31-37 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-30 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    - a) All
    - b) Some \*
    - c) None of:
      1. Certified copies of the priority documents have been received.
      2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
      3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
 Paper No(s)/Mail Date 04/01/04.
- 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_.

1) Claims 1 to 37 are pending in the instant application. Claims 1, 7 to 12, 16 to 21, 24, 26, and 29 have been amended as requested by Applicant in the correspondence filed 01 April of 2004.

2) Claims 31 to 37 stand withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the correspondence filed 22 October of 2003.

3) Any objection or rejection of record that is not expressly repeated in this action has been overcome by Applicant's response and withdrawn.

4) The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5) The instant specification fails to comply with 37 C.F.R. § 1.84(U)(1) for those reasons of record in section 5 of the previous office action. The proposed amendment to the drawings does not resolve this issue because Figure 1 is still presented on two sheets, Figure 2 is presented on four sheets, etc. As stated in the original objection, partial views of a drawing which are intended to form one complete view, whether contained on one or several sheets, must be identified by the same number followed by a capital letter.

6) Applicant is advised that should claim 1 be found allowable, claim 7 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing

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one claim to object to the other as being a substantial duplicate of the allowed claim.

See MPEP § 706.03(k).

7) Applicant is advised that the inclusion of claim 16 with claims 17 to 19 in the objection to improperly dependent claims in section 8 of the previous office action was in error. Claim 16 was a properly dependent claim as originally presented. Further, claims 18 and 19 can properly depend from claim 17 so long as claim 17 is a properly dependent or independent claim. Claims 18 and 19 were originally objected to because their indirect dependence from claim 1 via claim 17 was improper, since they would not meet the infringement test.

8) Claims 1 to 30 stand rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. These claims are vague and indefinite in so far as they employ the term "modified GPCR" as a limitation in the absence of a point of reference for those reasons of record in section 10.1 of the previous office action. As stated therein, in order for an item to be "modified" it must be altered from a previous form. Therefore, an unambiguous application of the limitation "modified" requires the identification of the original, unmodified item and the nature of the change or changes made thereto. When applied to a protein, one generally describes a modified form of a protein by reference to the structure of a native or natural protein, in combination with a description of the specific additions, deletions or substitutions made thereto. In the instant claims, the recitation of "amino acids from a first GPCR and amino acids from a second GPCR" is meaningless because no structure is recited beyond that implied by

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the limitation "GPCR". An amino acid is a monomeric unit, such as tyrosine, leucine, proline, or glycine, of which polypeptides are composed. The amino acid sequence of a GPCR will almost invariably contain all of the twenty common amino acids. Therefore, an artisan cannot envision that subject matter encompassed by the limitation "comprising amino acids from a first GPCR" since all proteins are going to comprise two or more of the twenty common amino acids and the origin of those amino acids is undeterminable.

The definition of the limitation "modified GPCR" that is provided in paragraph 099 on page 23 of the instant specification does remedy the deficiencies of the claims because the definition provided by the specification also fails to identify a point of reference.

Applicant may wish to consider claim language such as "a modified G protein-coupled receptor comprising the amino acid sequence of a first G protein-coupled receptor, wherein the carboxyl terminal tail of said amino acid sequence comprises an NPXXY (SEQ ID NO:82) motif, said modified G protein-coupled receptor differing from that of said first G protein-coupled receptor by the addition of one or more phosphorylation sites from a different G protein-coupled receptor to the carboxyl terminal tail of said first G protein-coupled receptor, wherein said modified G protein-coupled receptor further comprises a palmitoylation site 10 to 25 amino acid residues downstream of the NPXXY (SEQ ID NO:82) motif". If such language is adopted, the term "the second GPCR" as it appear in claim 4, for example, will need to be changed to "the different G protein-coupled receptor". Further, claim 14 will remain vague and

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indefinite because the limitations "additions", "substitutions" and "deletions" require a point of reference and none is given.

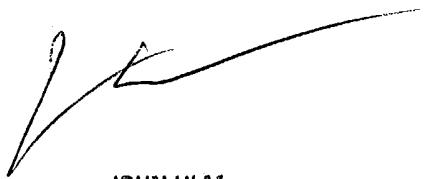
9) **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John D. Ulm whose telephone number is (571) 272-0880. The examiner can normally be reached on 9:00AM to 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kunz Gary can be reached on (571) 272-0887. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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